Rural Prophylaxis Mass Clinic Planning for Epidemic or Terrorism Events Shiprock Service Unit – Indian Health Service – 2003 Best Practices

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Motivation

Because of increased national awareness of infectious disease, both as a weapon of mass destruction and as an emerging potential epidemic, the need was identified to be able to administer vaccinations or prophylactic medications to large populations in a brief period of time using currently available resources.

Local history demonstrates the ability for hospitals on the Navajo Nation to react to small community epidemics, such as meningitis, measles, hanta-virus, and plague. In year 1991, 60,000 were vaccinated against measles, across the Navajo Nation, over a 30 to 60 day period, there-by averting an epidemic. In the mid 1990s, several thousand exposed persons were given meningitis prophylaxis after several Meningococcal deaths. In both of these cases, community clinics were established at community Chapter Houses. These community clinics have been staffed entirely with Public Health personnel.

Current concerns were triggered by the use of *Bacillus Anthraxis* in 2001, the potential use of smallpox as a bio-weapon, and the emergence of SARS. The need to be able to vaccinate or prophylaxis a large number of community members in a very brief period of time would overwhelm the resources of any Public Health department. If the need for prophylaxis were local only, additional staff could be requested from other health departments and federal agencies. In a large state or national situation, outside

resources may not be readily available. Additional staff could be recruited from local hospital and clinics, but would be limited due to the need to continue medical care. Potential additional staff needed to be discovered from local sources to supplement Public Health staff.

Problem Statement

The Shiprock Service Unit (SRSU) consists of a small, comprehensive, acute care medical facility, Northern Navajo Medical Center (NNMC), and a public health clinic. The SRSU is tasked with responding to the medical needs of a population of 50,500 community members. NNMC is the sole Indian Service hospital provider for a large geographic area covering a significant portion of San Juan County, New Mexico along with small areas in eastern Arizona and southern Utah. This "service area" is divided into 22 community units called "Chapters" with a population of about 50,000.. San Juan Regional Medical Center (SJRMC) in Farmington provides hospital care for the remainder of the approximately 150,000 population in San Juan County. New Mexico Department of Health maintains an office in San Juan County with a small staff.

In an infectious disease emergency, these 3 agencies would face the challenge of designing and staffing a prophylactic care/vaccination clinic for 150,000 persons, possibly using only the personnel resources available in the county.

(Solution: Ask the community for help.)

Approach

Local Emergency Planning Committee (LEPC) Public Health Committee

Historically hospitals, county health departments, and other medical entities within San Juan County (SJC) have not had a close working relationship, and

communication has been poor. San Juan County has a strong Local Emergency Planning Committee (LEPC), although heavily involved with hazardous material issues due to the large number of oil and gas companies in the area. The LEPC has always solicited membership from all potential emergency response agencies. The SJC LEPC monthly business meeting was the catalyst for representatives from the two different departments of public health to meet and realize the need for collaboration, which resulted in a LEPC Public Health Committee (LEPC PHC).

The LEPC PHC began meeting just a few months prior to September 11, 2001. Immediately after September 11, it became obvious to the committee members that they would be called on to assure that San Juan County had adequate plans to react to the use of a biological weapon. Committee members began this process by working on a mission statement, a scope of practice, and comprehensive membership list. The committee became a drawing power bringing together representatives from both hospitals, state and Indian Health Service (IHS) public health departments, local school districts, mental health providers, numerous smaller medical entities, and the county emergency manager, providing a forum for communication and exchange of ideas and a collaborative force for change.

The public health committee mission statement is:

> The committee shall upon request, be responsible for various aspects of health issues in any type of disaster, whether man made or natural or epidemiological, including but not limited to: disaster-planning, education, coordination of emergency health services, activation of the public health plan, and the collection of epidemiological data.

Local Emergency Planning Committees have traditionally responded to hazmat emergencies. Small communities do not have the privilege of having multiple response

groups for different kinds of hazards forcing their LEPCs to take on an all-hazard approach to emergency care. The San Juan County LEPC has been an all-hazard committee for a number of years. Introducing the idea that disease can have an equally debilitating effect on a community, as an oil-spill or large fire, was a hurdle that had to be accomplished in making the public health committee a permanent part of SJC emergency planning.

After the anthrax-by-mail attacks on the east coast in 2001; this committee was informed of state plans to start developing mass prophylaxis clinics, should New Mexico (NM) be targeted for a similar attack. The NM state's plans emphasized the use of large, centrally located prophylaxis clinics, which in San Juan County would require some of the population to drive more than two hours to get care. Because the Shiprock Service Unit had a proven history of having provided prophylactic care, and having the need to serve a large rural population, the county health department representative agreed to allow SRSU to design several smaller rural clinics to work in conjunction with the larger county department of health clinic systems. This would also benefit the county department of health as SRSU's clinics would serve about 1/3 of the county's population using their (SRSU) own personnel.

Shiprock Service Unit

With the charge to develop smaller rural clinics, a small design team was developed at SRSU including public health nursing (PHN), environmental health, an emergency room physician, and a Navajo Nation tribal emergency response officer. A design team is essential for any service area wanting to do this type of clinics, along

with the support of hospital administrative staff. Staff time and travel was needed for staff members to attend community meetings, education, and review chapter buildings.

This team based their clinic design on one member's experience of Washington, DC mass vaccine clinics, and on ideas from the LEPC PCH's discussions on the NM State's plans. Clinic outline, patient flow pattern, and staffing pattern were adjusted to allow for language and cultural issues important to the IHS philosophy. Calculations based on the number of available health care professional personnel showed that we could not staff 22 simultaneous chapter house clinics. The committee decided that 5 clinics, strategically located to cover the entire service area, proved more feasible for medical staffing needs. There were not, however, enough hospital personnel to provide for the required number of non-medical staff. The decision was made to go to the communities and ask for help, requesting for volunteers to staff the non-health care positions.

Other considerations unique to the development of a rural clinic system included the lack of electricity and refrigeration in some of the more remote communities. Road signs and addresses are not found in many service areas. Persons unfamiliar with the area locale would not able to effectively locate many homes in the area. Community members who are familiar with the area, however, would be able to easily locate and assist other community members requiring special assistance.

Navajo culture warns against the discussion of disaster and disease processes. The clinics discussed through this paper are prophylaxis clinics, meaning clinics "to keep well people well." This was an essential part of community education, teaching that there are numerous ways that the Navajo people prophylactically care for

themselves everyday. Brushing teeth and wearing seat belts were connected to disease prevention and the use of mass prophylactic community clinics.

Ideas from the design team were taken to the public through the use of community meetings. Community meetings were arranging by sending letters to public health staff, local political leaders, emergency responders, and health care workers with an invitation to participate in clinic planning and a pot-luck lunch. Community members meet several times to learn about what prophylactic care is and the need to plan community prophylactic clinics. Community meetings also served to identify community views to disease problems, discover community concerns, and discover numerous details that the planning committee had not thought about. It was important for the design team to prepare an agenda and have a significant amount of flexibility.

Community involvement

Community prophylaxis clinics can be placed in schools, community buildings, bingo parlors, and churches. The community told us that sometimes people do not understand that clinics will be providing disease prevention and that the parents might be afraid to return their children to a school building due to this misunderstanding. Community buildings, called chapter houses, were selected as sites for clinics. The chapter house is the social, political and often geographical center of Navajo communities. It is a natural gathering place and a logical choice for any emergency meeting or service. As a community owned public building, access to chapter houses can be granted by the community itself.

Valid questions were raised concerning the use of hospitals for the prophylaxis clinics, rather than community sites, but hospitals are needed to be saved for the sick

and worried-well. Hospitals have and will continue to assist in prophylactic care as able, but to depend on a single facility to meet the full community need in a large scale event was deemed infeasible. An additional consideration is the fact that hospitals can become a quarantine site leaving a community without prophylactic clinic plans.

The use of volunteers is essential in the operations of community clinic, as the Shiprock Service Unit is not able to field enough personnel to completely staff community clinics and maintain essential hospital medical services. Volunteers can function as runners, writers and interpreters. For example, a community member serving as a “Greeter” (triage) will be provided a card listing several questions (designed by the medical staff) to ask community members arriving to the clinic. If an individual answers positively to the listed question(s) then he/she will be sent to a separate, outside clinic, for evaluation of acute disease. If the individual answers negatively, then he/she will be allowed into the chapter clinic for prophylaxis care. This simple triage position is an example to one of the many clinic positions which most community members can perform, with minimal instruction and no need for prior training.

For a 1,000 person-a-day community clinic, working 10-hour days, with intention of serving 10,000 community members in 10 days, 6 clinic stations were identified, using approximately 13 medical staff and 21 community volunteers. Station #1 is tasked to triage (greeter) community members by asking several pre-designed questions and would be staffed with 3 volunteer interviewers and 1 volunteer runner. Station #2, an isolation station for community members identified as possibly having an infectious condition, would require 1 MD or nurse practitioner, 1 PHN (for community communicable disease follow-up), and 1 nurse aid. Most of the community population

will progress from station #1 to station #3 for registration information accumulation; with registration having a planned staff of 6 volunteer community members. Station #4 is education with the use of a video tape or a script read to small groups for instruction in the reason for the clinic and the need for prophylactic measures, and staffed with 2 medical educators and 1 volunteer. Even with education materials prepared ahead of time, this station will need to be staffed by medical educators due to the need to be able to answer questions from the public accurately. Station #5 may be a single station of screening and treatment or may be split into two stations, depending on the disease of concern. This station is staffed with 5 nurses, pharmacists or other health care providers, yet also needs a compliment of 7 volunteers to act as scribes and runners. Station #6 is a medical station for compromised community members who may need more in-depth evaluation prior to prophylaxis and is mostly staffed with medical personnel, as seen at the isolation station. Additional clinic staff needs include a supervisor, mental health worker, and security officer(s).

It is acknowledged that some disease concerns may need a more rapid response than 10 days. This community plan can be expanded for more rapid processing at the direction of the clinic head if warranted and if staff levels permit.

Community education and response

It is imperative to utilize the existing legal systems to gain permission to utilize community buildings. SRSU serves 22 identified communities called “Chapters,” each of which have a community building and legal system of response called “resolutions.” Each chapter was approached at a community chapter meeting, provided education on clinics, and presented a draft resolution to vote on. Educators taught that SRSU did not

have the personnel to assist with a potential 22 simultaneous sites, but felt that there was adequate medical staff to assist with 5 sites if chapter communities would volunteer to help. Not only were the communities being asked to assist with the chapters, but also to work together for the collective good of the larger community rather than separately within their own chapters. Chapter houses responded to community education with the passing of legal resolutions agreeing to "plan, prepare, and facilitate a clinic at their chapter house as a primary site or being willing to support a primary site at another location and for their chapter house to serve as a secondary site as needed."

Results

1. Traditionally, NNMC and the Shiprock community have created their own individual disaster drills and rarely sat at a table and conversed with county health departments or the other hospital within the county. Through LEPC activities, SRSU started to participate in county-wide drills, some of which involved up to 60 out-side agencies and learned to communicate with other health service departments and facilities. Additionally, a landmark Memorandum of Agreement was facilitated between NNMC and San Juan Regional Medical Center, in which both facilities agreed to work together to expedite the transfer of disaster victims.

2. NM State, San Juan County, has a county wide emergency plan, which has never included medical concerns. An annex was written for the emergency county plan to include the Shiprock Agency mass prophylaxis community clinic plan. The Annex was additionally reviewed by the NM State Department of Health with plans for the annex to be added to their over-all response plan and Strategic National Stockpile Plan.

3. Chapters with no history of collaborating with each other or with other agencies have now done so to create a plan to provide prophylactic care to their own community members and have created Resolutions to act as Memoranda of Agreement to that end. The Shiprock Service Unit has equally responded by adding mass community clinics as an annex to the hospital epidemiological response plan. Signed policies have been returned to each chapter to also act as Memoranda of Agreement.

4. The Navajo Area IHS Office has seen the need to replicate this program and made allowances for a public health nurse to travel to other Navajo Service Areas, teaching hospitals "how to go to their community and ask for help." It has been noted that the use of an experienced facilitator for hospital and community meetings has helped in the success of spreading this program.

Conclusions

In response to recent national crises, a smaller comprehensive rural medical facility has had to face the prospect of providing a system for prophylactic care for its complete population. This has forced with medical facility to ask for help from its community members. Historically, the community population anticipated that the medical facility would always be there to meet any medical need. With education, community members learned about prophylactic care and how they could help. Twenty-two individual community chapter houses voted and passed legal resolutions agreeing to "plan, prepare, and facilitate" mass prophylactic clinics and to provide primary or secondary facilities for these clinics. Instead of expecting the small rural hospital to come to the community; the community is now asking where to go and how they can help.